

CLAIMS

1. An air intake device of internal combustion engine, comprising: a restriction valve provided in an air intake path of the internal combustion engine; and an air flow rate
5 sensor, provided in the air intake path and disposed on the downstream side of the restriction valve, for measuring the flow amount of air suctioned into the air intake path; wherein
the air flow rate sensor comprises an air flow path and a sensor element disposed in the air flow path, and is disposed so that the axis of the air flow path is inclined with
10 respect to the axis of the air intake path.
2. The air intake device of internal combustion engine according to claim 1, wherein
the restriction valve comprises a turning shaft which is perpendicular to the axis of the air intake path and blade portions for opening and closing the air intake path which
15 turns centering around the turning shaft; and
the air flow rate sensor is disposed so that the axis of the air flow path is inclined substantially in the same direction of the blade portions in a state where the air intake path is opened by turning the blade portions.
- 20 3. The air intake device of internal combustion engine according to claim 2, wherein
the angle of the axis of the air flow path with respect to the axis of the air intake path is 30° or more but 60° or less.
4. A method of measuring air intake amount of internal combustion engine, which
25 measures the amount of air suctioned into the air intake path by using an air flow rate

sensor, including a sensor element and an air flow path having the sensor element disposed therein, which is disposed on the downstream side of the restriction valve in the air intake path of an internal combustion engine so that the axis of the air flow path is inclined with respect to the axis of the air intake path; wherein

- 5 the air amount is calculated on the basis of the flow rate of air flowing into the air flow path.